

REMARKS

The Invention

The invention provides a bandsaw blade having un-set teeth, each cutting tooth having a cutting extension. The cutting extension extends beyond the height of the tooth body. An individual cutting extension has a width less than the width of the tooth body, but the total width of the cutting extensions in a group of teeth is the same as, or greater than, the width of the teeth. The cutting extensions are positioned on the teeth in a group so that outer edges of the one cutting extension are generally aligned with the outer edge of a cutting extension on another tooth or aligned with the outer edge of the tooth. Thus, the cutting extensions are not aligned. As used herein, "aligned" means aligned as viewed along the longitudinal axis of the bandsaw blade, as shown in Figures 5A and 7B, reproduced below.

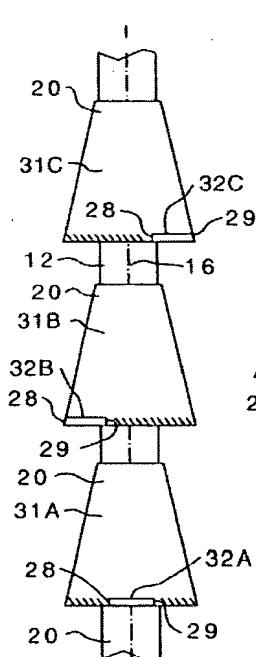


FIG. 5A

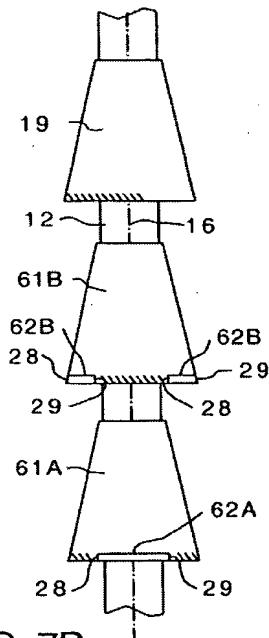


FIG. 7B

Preferably, the cutting extensions within a group are each the same width, e.g., as shown in Figure 5A above, one-third the width of the tooth. The cutting extensions

within a group of teeth are positioned so that each tooth is located over a different portion of each tooth in the group. Thus, in a three-tooth group, each extension is one-third the width of the tooth. One extension is located over the left most third of one tooth, a second extension is located over the center third of another tooth, and a third extension is located over the right third of the remaining tooth. Generally, if there are "n" teeth in a group, each tooth has an extension wherein the extension has a width that is $1/n^{\text{th}}$ the width of the tooth.

Alternatively, a single tooth may have more than one extension, as shown in Figure 7B, so long as the total width of the sum of the widths of the extensions within a set group of teeth is generally equal to or greater than the width of the tooth body. For example, in a two-tooth group, the first tooth may have a centrally located extension that is one-half the width of the tooth body. The second tooth in the group has two extensions, each being about one-fourth the width of the tooth body, located adjacent to the outer edges of the tooth. Thus, the total width of the extensions, $1/2 + 1/4 + 1/4$, is about the same as the width of the tooth and the extensions are not aligned with each other. As such, in either embodiment, the cutting load on each tooth is about the same.

Status of the Claims

Claims 1, 3-12, 15-17, and 19 remain pending in this application. Claims 1, 3-11, 15-17 and 19 would be allowable if rewritten or amended to over the rejections under 35 U.S.C. § 112, second paragraph.

Claims 1, 3-12, 15-17, and 19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter.

Claims 1, 3-12, 15-17, and 19 ; Rejected Under 35 U.S.C. § 112, Second Paragraph

Claim 1 has been amended to indicate that within a group of teeth, the cutting extensions on those teeth that have such cutting extensions do not have a portion of the cutting extension substantially aligned with another cutting extension within that group of teeth. Claims 3 and 4 depend from claim 1 and rely on their dependency for patentability.

The Examiner has rejected claim 5 stating that the phrase, “each said group of teeth includes a plurality of teeth” is redundant. Claim 5, however, recites “each said group of teeth includes a plurality of **cutting** teeth” (emphasis added). The second and third phrases cited by the Examiner have been amended. With regard to the first phrase, Claim 1 recites a “plurality of teeth,” that “some of said teeth” have a cutting extension, and that the teeth are disposed in groups. Thus, under Claim 1, there may be teeth, or a group of teeth, that do not include a cutting extension. That is, a hybrid band saw having different types of teeth. Claim 5 further limits claim 1 by defining a subset of teeth, cutting teeth, which are teeth which have a cutting extension, and reciting that each group includes a plurality of cutting teeth. It is noted that some teeth in such a group may be raker teeth as set forth in Claim 7. As such, Claim 5 is in proper form and the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

With regard to Claim 6, the Examiner stated that the language used in Claim 6 was unclear in view of a phrase in Claim 1. Initially, it is noted that the cited phrase in Claim 1 has been amended. It is also noted that Claim 6 recites “cutting teeth” which are not recited in Claim 1. Finally it is noted that the phrase cited by the Examiner, “each said cutting tooth having a cutting extension,” is actually part of the longer clause reading, “each said cutting tooth having a cutting extension with a width that is about one third the width of each said tooth body.” Thus, Claim 6 does not merely restate that the cutting teeth have a cutting extension, as implied by the out of context phrase quoted by the Examiner. Instead, the full clause of Claim 6 states the width of the cutting extensions relative to the width of the tooth. As such, Claim 6 is in proper form and the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

With regard to Claims 8 and 10, the Examiner stated that the language used in Claims 8 and 10 was unclear in view of a phrase in Claim 1. The rejections of Claims 8 and 10 are substantially similar to the rejection of Claim 6. It is noted that Claim 6 addresses a group of three teeth with a cutting extension being 1/3 the width of each tooth. Similarly, Claim 8 addresses a group of four teeth with a cutting extension being 1/4 the width of each tooth and Claim 10 addresses a group of five teeth with a cutting extension being 1/5 the width of each tooth. The arguments set forth above

with regard to Claim 6 are equally applicable to the rejections of Claims 8 and 10. As such, Claims 8 and 10 are in proper form and the rejections under 35 U.S.C. § 112, second paragraph, should be withdrawn.

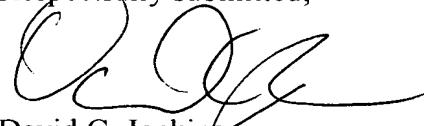
The Examiner has rejected claim 12 stating that the phrase, “each said group of teeth includes a plurality of teeth” is redundant. Claim 12, however, recites “each said group of teeth includes a plurality of **cutting** teeth” (emphasis added). With regard to the relationship between Claims 1 and 12, it is noted that Claim 1 recites a “plurality of teeth,” that “some of said teeth” have a cutting extension, and that the teeth are disposed in groups. Thus, under Claim 1, there may be teeth, or a group of teeth, that do not include a cutting extension. That is, a hybrid band saw having different types of teeth. Claim 12 further limits claim 1 by defining a subset of teeth, cutting teeth, which are teeth which have a cutting extension, and reciting that each group includes a plurality of cutting teeth. It is noted that some teeth in such a group may be raker teeth. Claim 12 has also been rewritten in independent form and states that some teeth have “at least one” cutting extension. In view of this amendment, Claim 12 is in proper form and the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn. Applicant further request that the Examiner rejoin Claims 13 and 14 in view of this amendment.

Claim 15 has been amended. In view of this amendment, Claim 12 is in proper form and the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn. Claim 18 has been canceled.

CONCLUSION

Based on the amendments and remarks set forth above, Applicant submits that the application is now in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,



David C. Jenkins
Registration No. 42,691
Eckert Seamans Cherin & Mellott, LLC
600 Grant Street, 44th Floor
Pittsburgh, PA 15219
Attorney for Applicant

(412) 566-1253